Working

MINIMUM FILING FEE: $100.00
FILE ORIGINAL & ONE COPY
TYPE OR PRINT IN BLACK INK
(For explanation of entries required, see booklet "How to File an Application to Appropriate Water in California")

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD
DIVISION OF WATER RIGHTS
901 P Street, Sacramento
P.O. Box 2000, Sacramento, CA 95812-2000

1995 JUN 13 AM 8:19
DIV. OF WATER RIGHTS SACRAMENTO

(Check one box only)

[X] APPLICATION TO APPROPRIATE WATER BY PERMIT

or

[ ] REGISTRATION OF SMALL DOMESTIC USE APPROPRIATION*

(If this is used to register a small domestic use appropriation, the terms "application" and "applicant" herein, and in related forms, shall mean "registration" and registrant.")

Application No. 30354
(Leave blank)

1. APPLICANT

County of Sacramento and Sacramento County Water Agency
(Name of applicant)

Water Resources Division, County of Sacramento

(916) 440-6851
(Telephone number where you may be reached between 8 a.m. and 5 p.m. - include area code)

827 7th Street, Room 301 — Sacramento — CA — 95814
(Mailing address) (City or town) (State) (Zip Code)

2. SOURCE

Per 11-17-05

a. The name of the source at the point of diversion is 1) ~~American River tributary~~ to Sacramento River
(If unnamed, state that it is an unnamed stream, spring, etc.)

and 2) Sacramento River tributary to Suisun Bay

b. In a normal year does the stream dry up at any point downstream from your project? YES [ ] NO [X] If yes, during what months is it usually dry? From ______ to ______

What alternate sources are available to your project should a portion of your requested direct diversion season be excluded because of a dry stream or nonavailability of water? Local groundwater, see application frontispiece (Overall Project Description).

3. POINTS of DIVERSION and REDIVERSION

a. The point(s) of diversion will be in the County of Sacramento

b. See frontispiece for explanation of diversion plan.

List all points giving coordinate distances from section corner or other tie as allowed by Board regulations, i.e. California Coordinate System	Point is within (40-acre subdivision)	Section	Township	Range	Base and Meridian
See Exhibit 1	1/4 of 1/4				
	1/4 of 1/4				
	1/4 of 1/4				

c. Does applicant own the land at point of diversion? YES [ ] NO [X]

d. If applicant does not own land at point of diversion, state name and address of owner and what steps have been taken to obtain right of access: See Exhibit 1

4. PURPOSE of USE, AMOUNT and SEASON

a. In the table below, state the purpose(s) for which water is to be appropriated, the quantities of water for each purpose and the dates between which diversions will be made. Use gallons per day if rate is less than 0.025 cubic foot per second (approximately 16,000 gallons per day). Purpose must only be "Domestic" for registration of small domestic use.*

PURPOSE OF USE (Irrigation, Domestic, etc.)	DIRECT DIVERSION				STORAGE		
	QUANTITY		SEASON OF DIVERSION		AMOUNT	COLLECTION SEASON	
	RATE (Cubic feet per second or gallons per day)	AMOUNT (Acre-feet per year)	Beginning Date (Mo.&Day)	Ending Date (Mo.&Day)	Acre-feet per annum	Beginning date (Mo.&Day)	Ending Date (Mo.&Day)
Municipal[1]	286 cfs	120,000	Jan. 1[1]	Dec. 31	40,000[2]	Jan 1[1]	Dec. 31
		120,000	TOTAL AMOUNT		40,000	TOTAL AMOUNT	

b. Total combined amount taken by direct diversion and storage during any one year will be 160,000 acre feet.

* Not to exceed 4,500 gallons per day by direct diversion or 10 acre-feet per annum by storage.

WR 1 (6/91) FOR0053-R1

[1] Excluding July 1-October 31 for American River Diversion

[2] Storage in underling aquifer through injection wells. See attached Supplement 1 to WR 1.

4/17/95 $100.00

5. JUSTIFICATION OF AMOUNT (For small domestic use registration, complete item b. only)

a. IRRIGATION: Maximum area to be irrigated in any one year is _____ acres.

CROP	ACRES	METHOD OF IRRIGATION (Sprinklers, flooding, etc.)	ACRE-FEET PER YEAR	NORMAL SEASON	
				Beginning Date	Ending Date

b. DOMESTIC: Number of residences to be served is _____. Separately owned? YES ☐ NO ☐
Total number of people to be served is_____. Estimated daily use per person is _____ (Gallons per day)
Total area of domestic lawns and gardens is _____ square feet.
Incidential domestic uses are _____
(Dust control area, number and kind of domestic animals, etc.)

c. STOCKWATERING: Kind of stock _____ Maximum number _____
Describe type of operation: _____
(Feed lot, dairy, range, etc.)

d. RECREATIONAL: Type of recreation: Fishing ☐ Swimming ☐ Boating ☐ Other ☐

e. MUNICIPAL: (Estimated projected use)

POPULATION 5-Year periods until use is completed		MAXIMUM MONTH		ANNUAL USE		
PERIOD	POP.	Average daily use (gal. per capita)	Rate of diversion (cfs)	Average daily use (gal.per capita)	Acre-foot (per capita)	Total acre-feet
See Exhibit 2						

Month of maximum use during year is _____. Month of minimum use during year is _____

f. HEAT CONTROL: The total area to be heat protected is _____ net acres.
Type of crop protected is _____
Rate at which water is applied to use is _____ gpm per acre.
The heat protection season will begin about _____ (Date) and end about _____ (Date)

g. FROST PROTECTION: The total area to be frost protected is _____ net acres.
Type of crop protected is _____
Rate at which water is applied to use is _____ gpm per acre.
The frost protection season will begin about _____ (Date) and end about _____ (Date)

h. INDUSTRIAL: Type of industry is _____
Basis for determination of amount of water needed is _____

i. MINING: The name of the claim is _____. Patented ☐ Unpatented ☐
The nature of the mine is _____. Mineral to be mined is _____
Type of milling or processing is _____
After use, the water will be discharged into _____
(Name of stream)
in _____ 1/4 of _____ 1/4 of Section _____, T _____, R _____, _____ B.&M.
(40-acre subdivision)

j. POWER: The total fall to be utilized is _____ feet. The maximum amount of water to be used through the penstock is _____ cubic feet per second. The maximum theoretical horsepower capable of being generated by the works is _____. Electrical capacity is _____ kilowatts at _____ % efficiency.
(Cubic feet per second x fall ÷ 8.8) (Hp x 0.746 x efficiency)
After use, the water will be discharged into _____
(Name of stream)
in _____ 1/4 of _____ 1/4 of Section _____, T _____, R _____, _____ B.&M. FERC No. _____
(40-acre subdivision)

k. FISH AND WILDLIFE PRESERVATION AND/OR ENHANCEMENT: YES ☐ NO ☒ If yes, list specific species and habitat type that will be preserved or enhanced in item 17 of Environmental Information form WR1-2.

j. OTHER: Describe use: _____. Basis for determination of amount of water needed is _____

6. PLACE OF USE

a. Does applicant own the land where the water will be used? YES ☐ NO ☒ is land in joint ownerhsip? YES ☐ NO ☒
(All joint owners should include their names as applicants and sign the application.)
If applicant does not own land where the water will be used, give name and address or owner and state what arrangements have been made with the owner.
Applicant will supply water to agencies which purvey water in the place of use.

b.

USE IS WITHIN (40-acre subdivision)	SECTION	TOWNSHIP	RANGE	BASE & MERIDIAN	IF IRRIGATED	
					Number of acres	Presently cultivated (Y/N)
1/4 of 1/4	See Exhibit 3					
1/4 of 1/4						
1/4 of 1/4						
1/4 of 1/4						
1/4 of 1/4						
1/4 of 1/4						

(If area is unsurveyed, state the location as if lines of the public land survey were projected, or contact the Division of Water Rights. If space does not permit listing all 40-acre tracts, include on another sheet or state sections, townships and ranges, and show detail on map.)

7. DIVERSION WORKS

a. Diversion will be by gravity by means of _____
(Dam, pipe in unobstructed channel, pipe through dam, siphon, weir, gate, etc.)

b. Diversion will be by pumping from See Exhibit 1 Pump discharge rate _____ Horsepower _____
(Sump, offset well, channel, reservoir, etc.) (cfs or gpd)

c. Conduit from diversion point to first lateral or to offstream storage reservoir:

CONDUIT (Pipe or channel)	MATERIAL (Type of pipe or channel lining indicate if pipe is buried or not	CROSS SECTIONAL DIMENSION (Pipe diameter or ditch depth and top and bottom width)	LENGTH (Feet)	TOTAL LIFT OR FALL		CAPACITY (Estimate)
				Feet	+or-	
See Exhibit 1						

d. Storage reservoirs:(For underground storage, complete Supplement 1 to WR1, available upon request.)

Name or number of reservoir, if any	DAM				RESERVOIR		
	Vertical height from downstream toe of slope to spillway level (ft.)	Construction material	Dam length (ft.)	Freeboard Dam height above spillway crest (ft.)	Approximate surface area when full (acres)	Approximate capacity (acre-feet)	Maximum water depth (ft.)

e. Outlet pipe: (For storage reservoirs having a capacity of 10 acre-feet or more.)

Diameter of outlet pipe (inches)	Length of outlet pipe (feet)	FALL (Vertical distance between entrance and exit of outlet in feet)	HEAD (Vertical distance from spillway to outlet pipe in reservoir in feet)	Estimated storage below outlet pipe entrance (dead storage)

f. If water will be stored and the reservoir is not at the point of diversion, the maximum rate of diversion of offstream storage will be _____ cfs. Diversion of offstream storage will be made by: ☐ Pumping ☐ Gravity

8. COMPLETION SCHEDULE

a. Year work will start 1998 b. Year work will be completed 2030
c. Year water will be used to the full extent intended 2030 If completed, year of first use _____

STATE OF CALIFORNIA
State Water Resources Control Board
DIVISION OF WATER RIGHTS
901 P Street, Sacramento
P.O. Box 2000, Sacramento, CA 95810

APPLICATION NO. 30454
(Leave Blank)

Deleted 11-17-05 kdm

UNDERGROUND STORAGE SUPPLEMENT
to APPLICATION TO APPROPRIATE WATER BY PERMIT

1. State amount of water to be diverted to underground storage from each point of diversion in item 3b of form WR1.

   a. Maximum Rate of diversion (1) _____ (2) _____ (3) _____ cfs
   b. Maximum Annual Amount (1) 20,000 (2) _____ (3) _____ acre-feet

2. Describe any works used to divert water to offstream spreading grounds or injection wells not identified in item 7 of form WR1.

   Existing City of Sacramento drinking water conveyance system and new conveyances for treated water, to be constructed south and east of existing systems.

3. Describe spreading grounds and identify its location and number of acres or location of upstream and downstream limits if onstream.

   Injection wells will be normal supply wells operated in reverse and will be located throughout Municipal POU shown in Exhibit 3.

4. State depth to groundwater table in spreading grounds or immediate vicinity: See Exhibit 4
   _____ feet below ground surface on _____, 19____ measured at a point located within the ____ ¼ of ____ ¼ of Section _____ T _____ R _____ _____ B&M.

5. Give any historic maximum and or minimum depths to the groundwater table in the area.
   Well Location 6N/5E-10G1 Maximum -70 feet below ground surface on Fall 1993 (date)
   Well Location 6N/5E-10G1 Minimum -20 feet below ground surface on Spring 1950 (date)

6. Describe proposed spreading operation. _____

7. Describe location, capacity and features of proposed pretreatment facilities and/or injection wells. Diverted water will be treated in existing or new drinking water treatment plants located at or near point of diversion. Injection wells will be municipal water supply wells operated in reverse.

8. Reference any available engineering reports, studies or data on the aquifer involved. (1) Sacramento County Water Agency - County Groundwater Model, Model Development and Basin Groundwater Yield, June 1993. (2) SCWA - Phase II - Groundwater Yield Analysis, Technical Memorandum No. 1, Dec. 1994. (3) State of Calif., Department of Water Resources - Bulletin No. 118-3, Evaluation of Groundwater Resources: Sacramento County, July 1974.

9. Describe underground reservoir and attach a map or sketch of its location. The underground reservoir lies under the entire municipal POU shown in Exhibit 3 and is part of the Central Valley Regional Aquifer. Storage will mainly occur in water bearing strata of the Victor and Laguna formations ranging from 0 to 300 feet below surface.

10. State estimated storage capacity of underground reservoir. Based on feasibility estimates, 40,000 acre-feet can be injected per year.

11. Describe existing use of the underground storage reservoir and any proposed change in its use. Water is currently pumped from the aquifer for municipal and agricultural uses. No change in use is proposed.

12. Describe the proposed method and location of measurement of water placed into and withdrawn from underground storage. The volume of water injected will be measured using well meters, as will the volumes pumped from the injection wells.

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State Water Resources Control Board
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901 P Street, Sacramento
P.O. Box 2000, Sacramento, CA 95810

APPLICATION NO. 30454
(Leave Blank)

UNDERGROUND STORAGE SUPPLEMENT
to APPLICATION TO APPROPRIATE WATER BY PERMIT

1. State amount of water to be diverted to underground storage from each point of diversion in item 3b of form WR1.

   a. Maximum Rate of diversion (1) _____ (2) _____ (3) _____ cfs
   b. Maximum Annual Amount (1) 20,000 (2) _____ (3) _____ acre-feet

2. Describe any works used to divert water to offstream spreading grounds or injection wells not identified in item 7 of form WR1.

   Existing City of Sacramento drinking water conveyance system and new conveyances for treated water, to be constructed south and east of existing systems.

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   Injection wells will be normal supply wells operated in reverse and will be located throughout Municipal POU shown in Exhibit 3.

4. State depth to groundwater table in spreading grounds or immediate vicinity: See Exhibit 4
   _____ feet below ground surface on _____, 19____ measured at a point located within the ____ ¼ of ____ ¼ of Section _____ T _____ R _____ _____ B&M.

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   Well Location 6N/5E-10G1 Maximum -70 feet below ground surface on Fall 1993 (date)
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12. Describe the proposed method and location of measurement of water placed into and withdrawn from underground storage. The volume of water injected will be measured using well meters, as will the volumes pumped from the injection wells.

9. GENERAL

a. Name of the post office most used by those living near the proposed point of diversion is See Exhibit 1

b. Does any part of the place of use comprise a subdivision on file with the State Department of Real Estate? YES [X] NO [ ]

If yes, state name of the subdivision Numerous subdivisions; see Place of Use Map (Exhibit 3)

If no, is subdivision of these lands contemplated? YES [ ] NO [ ]

Is it planned to individually meter each service connection? YES [X] NO [ ] if yes, When? Year 2000

c. List the names and addresses of diverters of water from the source of supply downstream from the proposed point of diversion: Downstream diverters too numerous to list.

d. Is the source used for navigation, including use by pleasure boats, for a significant part of each year at the point of diversion, or does the source substantially contribute to a waterway which is sued for navigation, including use by pleasure boats? YES [X] NO [ ] If yes, explain: Recreation occurs year-round on the American River.

10. EXISTING WATER RIGHT

Do you claim an existing right for the use of all or part of the water sought by this application? YES [ ] NO [X]

If yes, complete table below:

Nature of Right (riparian, appropriative groundwater	Year of First Use	Purpose of use made in recent years including amount, if known	Season of Use	Source	Location of Point of Diversion

11. AUTHORIZED AGENT (Optional)

With respect to [X] all matters concerning this water right application [ ] those matters designated as follows:

Keith DeVore, Chief, Water Resources Division

County of Sacramento — (916) 440 - 6851

(Name of agent) — (Telephone number of agent between 8 a.m. and 5 p.m.)

827 7th Street — Sacramento — CA — 95814

(Mailing Address) — (City or town) — (State) — (Zip Code)

is authorized to act on my behalf as my agent.

12. SIGNATURE OF APPLICANT

I(we) declare under penalty of perjury that the above is true and correct to the best of my (our) knowledge and belief.

Dated 4-14, 1995 at Sacramento, California

Ms. (Mr) Keith DeVore
Miss. Mrs.

(Signature of applicant)

(If there is more than one owner of the project, Please indicate their relationship.)

Ms. Mr.
Miss. Mrs.

(Signature of applicant)

Additional information needed for preparation of this application may be found in the Instruction Booklet entitled "HOW TO FILE AN APPLICATION TO APPROPRIATE WATER IN CALIFORNIA." If there is insufficient space for answers in this form, attach extra sheets. Please cross-reference all remarks to the numbered item of the application to which they may refer. Send original application and one copy to the STATE WATER RESOURCES CONTROL BOARD, DIVISION OF WATER RIGHTS, P.O. Box 2000, Sacramento, CA 95810, with $100 minimum filing fee.

NOTE:

If this application is approved for a permit, a minimum permit fee of $100 will be required before the permit is issued. There is no additional fee for registration of small domestic use.

Exhibit 1. Proposed of Points of Diversion, Location and Ownership of Land (Application Items No. 3 b and 3 d)

Diversion Point A-2: Fairbairn Water Treatment Plant Intake, American River.

3 b. Location based on California Coordinate System and Township/Range system

N 325,750; E 2,167,000 / Zone 2. T8N, R5E, MD base and meridian (B&M).

per 6-7-96 letter. KdM

3 d. Owner: City of Sacramento, Utilitities Department, 5770 Freeport Blvd, Sacramento, CA 95818.

Deleted per 11-17-05 proj desc. KdM

Use of this diversion point would be by agreement with the City of Sacramento. Expansion of this plant by the City of Sacramento is one of several alternatives being considered for increasing the City's water treatment capacity. The City of Sacramento would divert the water and supply it to the County through the City's conveyance system.

Nearest Post Office: Fair Oaks, 7880 Winding Way

Diversion Point S-1: New Water Treatment Plant , Sacramento River.

3 b. Location based on California Coordinate System and Township/Range system

N 356,571; E 2,119,090 / Zone 2. SW 1/4 of SE 1/4, S7, T8N, R5E, MD B&M.

3 d. Owner: County of Sacramento, 6900 Airport Blvd., Sacramento, CA 95837.

Deleted per 11-17-05 project desc. KdM

This alternative diversion point is a the new North Natoma water treatment plant potentially to be constructed by the City of Sacramento as one of several alternatives for increasing the City's water treatment capacity. The City of Sacramento would divert the water and supply it to the County through the City's conveyance system.

Nearest Post Office: North. Sacramento Carrier Annex, 241 Lathrop Way, Sacramento

Diversion Point S-2: Exisiting Water Treatment Plant Intake, Sacramento River.

3 b. Location based on California Coordinate System and Township/Range system

per 6-7-96 letter. KdM

~~N 356,571; E 2,119,090~~ / Zone 2. ~~SW 1/4 of SE 1/4, S7, T8N, R5E, MD B&M.~~

3 d. Owner: City of Sacramento, Utilitities Department, 5770 Freeport Blvd, Sacramento, CA 95818.

This alternative diversion point is the intake structure for existing City of Sacramento water treatment plant. Expansion of this plant by the City of Sacramento is one of several alternatives being considered for increasing

N 1977735.6', E 6702669.4' Zone II, NAD 83

per 11-17-05 proj desc. KdM

the City's water treatment capacity. The City of Sacramento would divert the water and supply it to the County through the City's conveyance system.

Nearest Post Office: State Capitol Stn, 915 Capitol Mall, Sacramento; and Broderick Branch, 900 Sacramento Ave, Broderick.

Diversion Point S-3: New Water Treatment Plant Intake, Sacramento River.

3 b. Location based on California Coordinate System and Township/Range system

N 294,000; ~~E 2,~~141,~~700~~ / Zone 2. NE 1/4 of SW 1/4, S11, T7N, R4E, MD B&M.

3 d. Owner: the County of Sacramento, Department of Public Works, 827 7th Street, Sacramento, CA. This alternative diversion point is a new water treatment plant probably to be constructed by the County of Sacramento as one of several alternatives for supplying treated water for the demands.

Nearest Post Office is: Land Park Stn, 5930 S. Land Park Dr., Sacramento

Rectangle defined by points
N 1934306.0', E 1934529.1', E 6702875.3' · N 1934252.4' ·
E 6703214.1', N 1934029.3', E 6703031.4'; Zone II - NAD 83

per 1147-05 project desc.
kdm

Exhibit 2. Justification of Amount of Diversion

(Application Item No. 5 a)

MUNICIPAL: (Estimated Projected Use) (a)

Population		Maximum Month		Annual Use		
Period	Population	Avg Daily Use (gal per capita)	Rate of Diversion (cfs)	Average Daily Use (gal per capita)	Acre-foot (per capita)	Total acre-feet
1990	83,877	511	66	319	0.36	30,000
1995	108,230	528	88	330	0.37	40,000
2000	132,583	539	111	337	0.38	50,000
2005	187,480	495	144	310	0.35	65,000
2010	242,376	472	177	295	0.33	80,000
2015	296,232	470	215	294	0.33	97,500
2020	350,088	469	254	293	0.33	115,000
2025	353,156	475	260	297	0.33	117,500
2030	356,223	481	265	301	0.34	120,000

(a) Irrigation demands in ag-use POU, see "Overall Project Description" for explanation. See Exhibit 3 for POU location. Adapted from April 1994 Draft Report, "Estimate of Annual Water Demand within the Sacramento Metropolitan Area", prepared for the City/County Office of Metropolitan Water Planning, by Boyle Engineering Corp.

APPLICATION TO APPROPRIATE WATER BY PERMIT

For Municipal (Treated) Uses

OVERALL PROJECT DESCRIPTION

See 1147-05 desc. kdm

Sacramento County (the County), through the Sacramento County Water Agency (SCWA), is pursuing supplemental surface water to help balance the demand and supply in the southern part of the County in order to make optimum use of available water resources. This area has been historically served by groundwater, and the increasing urbanization of the area is exacerbating the groundwater overdraft which has existed in the area for a long period of time. The County is submitting an application to appropriate water from the Sacramento and American Rivers. The water proposed for diversion in this application will be used as a water supply element in a conjunctive use program which includes surface water, groundwater and reclaimed water. To reduce or stop the rate of groundwater overdraft, the conjunctive use program is planned to take advantage of surface water when it is available and use groundwater during periods of cutbacks and shortages. The program will maximize the use of surface water by directly supplying municipal needs and by recharging the regional aquifer. Aquifer recharge will take place through in-lieu recharge by providing surface water for municipal use and injection of treated surface water through injection wells.

The conjunctive use program proposed will take advantage of surface water available in wet years to make up for shortages in dry years. To provide water for dry years, amounts will be diverted, in wet years, that are in excess of what is required to meet the annual municipal demands and this excess will be stored in local aquifers. The conjunctive use program will try to achieve a balance over an extended period of years so that the average recharge into the aquifer in years of excess surface water availability equals the average demand met by groundwater pumping in years of insufficient surface water availability.

To secure supplemental surface water, an application is submitted herewith for municipal use and groundwater recharge through injection of treated water. There are multiple diversion points requested for this application. This frontispiece explains the County's objectives in applying for this supplemental surface water and the proposed water management program that this water would facilitate.

PROPOSED DIVERSION PROGRAM

In years of abundant supply, surface water would be diverted for direct use by municipal users, and would also be used to recharge the groundwater basin through injection. Diversions would be regulated by the County to take advantage of flows in either the Sacramento or American Rivers which are in excess of existing water rights, minimum flows dictated the Hodge Decision criteria, Delta requirements and other appropriate environmental resource protection criteria. In dry years when surface supplies from these two sources are unavailable or limited, the deficiency in supply would be made up from pumped groundwater. Groundwater would also

provide the source of supply in the months of restricted diversions from either the American or Sacramento Rivers.

It is the intent of the County in structuring this application, to request from the State Water Resources Control Board (State Board) the flexibility to divert water up to the specified diversion rate from the American River as the first priority when it is available and the criteria controlling the diversion can be met. It is recognized that the period from July 1 through October 31 has been determined by the State Board to be fully appropriated, and no water could be diverted from the American River during that period. During the other months of the year, the County's first priority for diversion for municipal supplies would be from the American River. When the diversion rate from the American River is diminished because of the limitations on the available supply, the County, as a second priority, would begin diverting from the Sacramento River to either make up the remaining diversion rate requested in the application, or to take the entire requested diversion rate if no water is available from the American River. The rate of diversion from both sources would be dictated by the availability in each river which depends upon flow rates, other diversions, environmental criteria, and conditions in the Delta. If no surface water could be diverted from either source, the County would rely entirely on groundwater pumping.

PURPOSE AND NEED

In 1993, Sacramento County completed the current General Plan which provides for growth through the year 2030. This plan defines an Urban Services Area Boundary (USAB) which extends from the City of Sacramento city limits south to the Cosumnes River flood plain. Urban growth within this area would be permitted in accordance with the General Plan over the next 30 to 40 years, and the projected municipal water demand which this growth will ultimately generate is expected to create a need for 160,000 acre-feet per year (afa) of supplemental supply which cannot be safely met from the underlying groundwater basin. The County is requesting the right to divert sufficient surface water from the American and Sacramento Rivers, when conditions from either or both sources permit it, to meet the above described demands. Groundwater would be pumped as needed to meet demands during periods of restricted diversions. To augment the available groundwater supplies and to help reduce the existing cone of groundwater depression, the County is requesting the right to divert, in a given year, up to 40,000 acre feet (af) for recharge of the underlying groundwater basin, through injection wells.

REGIONAL WATER PLANNING

Concern over the water supply and demand imbalance in the Sacramento metropolitan area has led to the development of the Sacramento City-County Office of Metropolitan Water Planning and the Sacramento Area Water Forums Process, to obtain a regional consensus on water supply solutions. Through the forums process, representatives of environmental, business, agricultural, water supply and general public interests in the Sacramento area have been participating in the development of a long-term plan for water supply in the area. This application will be integrated by the County into the forums process to help solve the regional water supply problems.

The County has conducted a number of studies to better understand the regional water supply conditions, and has an integrated surface water and groundwater model. This model has been used to evaluate the effects on regional groundwater conditions of various alternative supply projects and conjunctive use programs. Benefits to the underlying groundwater basin of providing supplemental surface water to the south County area have been demonstrated with the model.

ATTACHED MUNICIPAL APPLICATION

The attached application to appropriate water is a component of a coordinated effort to obtain water from the American and Sacramento Rivers for municipal uses within the southern part of Sacramento County. The diverted surface water will be used conjunctively with groundwater and reclaimed water under a program designed to optimize the beneficial use and protection of the water resources, and to alleviate existing zones of groundwater overdraft in southern Sacramento County.

The application submitted herewith is for diversion of water for treated uses from the American and Sacramento Rivers, with one diversion point on the American River, and three potential diversion points on the Sacramento River. Treated water uses, for the purposes of this application package, occur in the municipal place-of-use (municipal POU) defined by the ultimate USAB developed in the Sacramento County 1993 General plan.

As the municipal POU is urbanized, irrigation demands will decrease and municipal demands will increase. Some currently unirrigated land within the municipal POU will be developed in the future and exert municipal demands which will be met with treated water. These two factors result in an increase in total water demands, over time, within the municipal POU.

Each diversion point within the application is identified by a letter and number. The letter indicates the source of the proposed diversion, with "A" indicating the American River, and "S" the Sacramento River. The number indicates the first (most upstream) proposed diversion point covered in the application. All diversion points proposed for a source are numbered sequentially, starting at the most upstream point.

Diversion Amounts and Rates

The attached application covers a proposed diversion of water for treated use from the American River at the existing Fairbairn Water Treatment Plant (A-2), and three diversion points on the Sacramento River, at a new facility in Natomas (S-1), the existing City of Sacramento Water Treatment Plant (S-2), and a new facility in the Freeport area (S-3). This application is described as follows:

Up to 160,000 afa will be diverted from the American and/or the Sacramento Rivers to meet municipal demands and groundwater injection uses in the municipal place of use identified in the application. The American River water will be diverted through the City's Fairbairn Water Treatment Plant diversion facility and treatment facilities (labeled A-2 on the application).

Treated water will be wheeled by the City to the south County area for direct use to meet municipal demands or for groundwater injection through dual purpose wells in the area. Three alternative diversion points are identified on the Sacramento River for a treated water supply. The point labeled S-1 on the application, is a new diversion and treatment plant in the Natomas area which will likely be constructed and operated by the City of Sacramento. Treated water from this plant will be wheeled to the County demand area through City facilities. The diversion point labeled S-2 on the application will be an expansion of the existing City of Sacramento diversion facility, with treatment in the City plant and wheeling through the City system to the south County area of demand. Diversion at the point labeled S-3 will be through a new diversion facility and water treatment plant, probably constructed and operated by the County, with treated water conveyance through a new pipeline to the area of demand. As explained above, the regional water supply plan will further evaluate these alternative diversion points and treatment facilities and one or more of the diversion points will be finally selected and the appropriate facilities expanded or constructed to implement the project.

Under Item 4 of this application, the maximum total annual amount of diversion from both sources is listed along with the total maximum rate of diversion. The maximum proposed annual diversion of 160,000 af is based on meeting the projected total annual demand in the year 2030. The total demand is the sum of direct municipal demands and estimated maximum groundwater injection rates.

The month of maximum municipal demand is July when no diversion is proposed from the American River, and thus diversions would be made from the Sacramento River. It is recognized that water may not always be available in the Sacramento River for diversion to meet the entire July demand, but the applicant wants the right to divert at this rate if the water is available. Any difference between the maximum municipal demand and available diversion rate would be met by pumping groundwater. The maximum diversion rate of 286 cubic feet per second (cfs) requested in this application is equal to the municipal demand projected for July, 2030. This maximum diversion rate will also occur in other months of the year in 2030 to meet direct municipal demands plus proposed groundwater injection quantities. Thus, the maximum rate of diversion may occur in a number of months depending on availability, demand and groundwater injection capacity.

Actual rates of diversion at a given point will depend on the availability of water from that source and other sources, actual demands and storage/recharge capacity. The availability depends on flow rates, other diversions and environmental criteria. A plan describing how diversions would be controlled to take advantage of availability, while meeting criteria for senior water rights and environmental protection, will be prepared by the County in conjunction with the State Water Resources Control Board. Documentation required to comply with CEQA will be prepared by the County for all aspects of the proposed project.

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